



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,477	04/27/2001	Robert Anderson Malaney	3961.46US01	9130
23552 7590 03/06/2007 MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			EXAMINER HOM, SHICK C	
			ART UNIT	PAPER NUMBER
			2616	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 09/844,477	Applicant(s) MALANEY ET AL.	
	Examiner Shick C. Hom	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,8,15,29,36,43,57-59 and 73-90 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 57-59 is/are allowed.
- 6) ☒ Claim(s) 1,8,15,29,36 and 43 is/are rejected.
- 7) ☒ Claim(s) 73-90 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2616

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 8, 15, 29, 36, 43, 57-59, and 73-90 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. Claims 73-90 are objected to because of the following informalities: In claims 73-90 line 1 delete the word "A" and insert ---The--- because they're reciting the method, the shaper, the memory medium, and the packet traffic policer of the base claims. Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 15 and 78-79 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 15 and 78-79 is directed to program codes per se, i.e. a sequence of instructions that can be

Art Unit: 2616

executed by a computer, which is not a process, machine, manufacture or composition of matter and thus non-statutory.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 8, and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Onyiagha (6,377,545).

Regarding claims 1, 8, and 15:

Onyiaga discloses a method of shaping input packet traffic to form output packet traffic, said method comprising steps of: specifying a probability parameter representing, in regard to a downstream buffer receiving said output packet traffic (see col.

Art Unit: 2616

2 lines 3-35 which recite using performance parameters to describe intervals between arrivals to predict the future behaviour of traffic sources for traffic shaping to smooth out the variable traffic clearly anticipate use of a probability parameter for shaping traffic),

the slope in the upper bound of (i) probability of buffer occupancy of the downstream buffer being exceeded versus (ii) buffer occupancy of the downstream buffer (col. 3 lines 34-55 recite setting bound on the downstream buffer and col. 6 lines 15-17 which recite the parameters determined being the probability distribution for cell arrival rates versus buffer occupancy being used for policing the traffic source);

specifying a rate parameter representing the mean rate of the output packet traffic, wherein the rate parameter and the probability parameter satisfy a relationship imposing a predetermined probabilistic limit on burstiness of the output packet traffic; and constraining, based upon the probability parameter and the rate parameter, transmission of the input packet traffic, thereby to produce said output packet traffic (see the abstract which recite the scheme for handling bursty traffic whereby cells may be dropped depending on the expected state of the buffers and based on expected traffic arrival rates).

Art Unit: 2616

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2616

8. Claims 29, 36, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onyiagha (6,377,545) in view of Chao (5,381,407).

Regarding claims 29, 36, and 43:

For claims 29, 36, and 43, Onyiagha discloses the packet traffic policer and method described in paragraph 4 of this office action. Onyiagha discloses all the subject matter of the claimed invention with the exception of means and method of tagging conforming packets in the input packet traffic wherein the tagged packets comprise a policed traffic stream as in claims 29, 36, and 43.

Chao from the same or similar fields of endeavor teach that it is known to provide means and method of tagging conforming packets in the input packet traffic wherein the tagged packets comprise a policed traffic stream (col. 4 lines 44-62 which recite tagging cells as in claims 29, 36, and 43).

Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide means and method of tagging conforming packets in the input packet traffic wherein the tagged packets comprise a policed traffic stream as taught by Chao in the means and method of shaping packet traffic of Onyiagha.

Art Unit: 2616

The means and method of tagging conforming packets in the input packet traffic wherein the tagged packets comprise a policed traffic stream can be implemented by connecting the means and method for tagging packets of Chao to the controller for shaping packet traffic of Onyiagha.

The motivation for providing means and method of tagging conforming packets in the input packet traffic wherein the tagged packets comprise a policed traffic stream as taught by Chao in the means and method of shaping packet traffic of Onyiagha being that it provides more efficiency for the system since tagging increases network throughput and decreases cell loss rate and because violation-tagging is "softer" than immediately discarding in that depending on the network congestion conditions, very few tagged cells may actually be discarded in the network. In addition, the traffic parameters agreed upon at the call set-up time may be relaxed, allowing more margining for false alarms, i.e., incorrectly identifying non-violated cells to violated cells as recited in Chao col. 4 lines 44-62).

Allowable Subject Matter

9. Claims 73-90 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.

Art Unit: 2616

10. Claims 57-59 are allowed.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C.

Art Unit: 2616

Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SH SH

Seema S. Rao
SEEMA S. RAO 311107
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600